

CONTRIBUTORS TO THIS ISSUE

Syed V. Ahamed, B.E., 1957, University of Mysore; M.E., 1958, Indian Institute of Science; Ph.D., 1962, University of Manchester, U.K.; Post-Doctoral Research Fellow, 1963, University of Delaware; Assistant Professor, 1964, University of Colorado; M.B.A. (Economics), 1978, New York University; Bell Laboratories, 1966-1981. At Bell Laboratories, Mr. Ahamed has worked in computer-aided engineering analysis and design of electromagnetic components, designed and implemented minicomputer software and hardware interfacing, applied algebraic analysis to the design of domain circuits, and investigated computer aids to the design of bubble circuits. He has investigated new varactor designs for microwave power in the C-band and developed hardware and software interfacing for audio frequency codecs. Beginning in 1975, he optimized codec designs, encoding techniques, and speech-encoded data storage and manipulation by minicomputers. Since 1977, he has been simulating the overall performance of the loop plant, while carrying bidirectional digital data in the range of 56 to 324 kbaud. He is currently a visiting professor in the Electrical Engineering Department at the University of Hawaii at Monoa, Hawaii and is on a leave of absence from Bell Laboratories.

Ruth Chang, B.A. (Physics/Astronomy), 1981, Wellesley College; Pennsylvania Power and Light Company, 1981—. Miss Chang was a participant in the Bell Laboratories Summer 1980 Research Program for Minorities and Women. Under this program, she assisted with the video colorization diagnostics in optical telecommunications project. Currently, she is a Mathematician at Pennsylvania Power and Light Company.

Albert A. Fredericks, B.S. (Mathematics), 1962, Fairleigh Dickinson University; M.S., 1965, Ph.D. (Mathematics) 1970, Courant Institute, New York University; Bell Laboratories, 1961—. Mr. Fredericks is supervisor of the Performance Analysis Methods group. His responsibilities include the development of methods for analyzing the performance of processor-based systems, including auxiliary microprocessors, mini-computer-based operations systems, data networks and stored program control switching system. Member IEEE, MAA, SIAM.

Dan L. Philen, B.S. (Chemistry), 1968, Auburn University; Ph.D. (Physical Chemistry), 1975, Texas A&M University; Georgia Institute of Technology, 1976-1979; Bell Laboratories, 1979—. Since joining Bell Laboratories, Mr. Philen has been engaged in exploratory measure-

ments on optical fiber properties. Member, American Chemical Society, Optical Society of America, Sigma Xi, Sigma Pi Sigma, Phi Lambda Upsilon.

Herman M. Presby, B.A., 1962, and Ph.D., 1966, Yeshiva University; Research Scientist, Columbia University, 1966-1968; Assistant Professor Physics, Belfer Graduate School of Science, Yeshiva University, 1968-1972; Bell Laboratories, 1972—. Mr. Presby is engaged in studies on the properties of optical fiber waveguides.

Lawrence R. Rabiner, S.B. and S.M., 1964, Ph.D. (Electrical Engineering), 1967, Massachusetts Institute of Technology; Bell Laboratories, 1962—. From 1962 through 1964, Mr. Rabiner participated in the cooperative plan in electrical engineering at Bell Laboratories. He worked on digital circuitry, military communications problems, and problems in binaural hearing. Presently, he is engaged in research on speech communications and digital signal processing techniques. He is coauthor of *Theory and Application of Digital Signal Processing* (Prentice-Hall, 1975) and *Digital Processing of Speech Signals* (Prentice-Hall, 1978). Member, IEEE ASSP Technical Committee on Digital Signal Processing, IEEE ASSP Proceedings Editorial Board, Acoustical Society Executive Council, Eta Kappa Nu, Sigma Xi, Tau Beta Pi. Fellow, Acoustical Society of America, IEEE.

Raymond Steele, B.S., 1959, Ph.D. (Electrical Engineering), 1975, Durham University, Durham, England; E. K. Cole, Ltd., 1959-1961; Cossor Radar, Electronics, Ltd., 1961-1962; The Marconi Company, 1962-1965; Royal Naval College, 1965-1968; Loughborough University of Technology, 1968-1979; Bell Laboratories, 1979—. At E. K. Cole, Ltd., Cossor Radar, Electronics, Ltd., and The Marconi Company, all located in Essex, England, Mr. Steele was engaged in research and development. As a member of the Lecturing Staff at the Royal Naval College in London, he lectured on telecommunications for the NATO and external London University degree courses. At the Loughborough University of Technology in Loughborough, England, he directed a research group in digital encoding of speech and television signals, in addition to serving as Senior Lecturer. Before joining Bell Laboratories on a full-time basis, Mr. Steele served as a part-time consultant to the Laboratories' Acoustics Research Department. Presently, he is a member of the Communications Methods Research Department. He is the author of *Delta Modulation Systems* published in 1975.